



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/040,100

01/04/2002

Paul L. Master

1030.024

8832

34756

7590

04/20/2006

GAMBURD LAW GROUP LLC
566 WEST ADAMS
SUITE 350
CHICAGO, IL 60661

EXAMINER

TRAN, NGHI V

ART UNIT

PAPER NUMBER

2151

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/040,100	Applicant(s) MASTER ET AL.	
	Examiner Nghi V. Tran	Art Unit 2151	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 39-53 is/are pending in the application.
- 4a) Of the above claim(s) 23-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 39-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>05/12/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. During a telephone conversation with Nancy R. Gamburd (Reg.#38,147) on December 12, 2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-22 and 39-53. Affirmation of this election must be made by applicant in replying to this Office action. Claims 23-38 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 8, 10, 14-17, 20, 22, 39, 46, 48, 50-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kovacs et al., U.S. Patent Application Publication No. 2001/0003191 (hereinafter Kovacs) in view of Fishman et al., U.S. Patent No. 6,871,236 (hereinafter Fishman).

4. With respect to claims 1 and 39, Kovacs teaches an apparatus for adaptive multimedia transmission and reception [fig.1], the apparatus comprising:

- a network interface;
- a plurality of heterogeneous computational elements, the plurality of heterogeneous computational elements including a first computational element and a second computational element, the first computational element having a first fixed architecture and the second computational element having a second fixed architecture, the first fixed architecture being different than the second fixed architecture [paragraph 0036]; and

However, Kovacs does not explicitly show an interconnection network coupled to the network interface and to the plurality of heterogeneous computational elements, the interconnection network operative to configure the plurality of heterogeneous computational elements for a first media functional mode of a plurality of media functional modes, in response to first configuration information, and the interconnection network further operative to reconfigure the plurality of heterogeneous computational elements for a second media functional mode of the plurality of media functional modes, in response to second configuration information, the first media functional mode being different than the second media functional mode.

In a wireless communication system, Fishman discloses an interconnection network coupled to the network interface and to the plurality of heterogeneous computational elements, the interconnection network operative to configure the plurality of heterogeneous computational elements for a first media functional mode of a plurality

of media functional modes, in response to first configuration information, and the interconnection network further operative to reconfigure the plurality of heterogeneous computational elements for a second media functional mode of the plurality of media functional modes, in response to second configuration information, the first media functional mode being different than the second media functional mode [fig.2; col.9, ln.30 – col.10, ln.64; and col.11, ln.17 – col.12, ln.14].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view Fishman by configuring and reconfiguring the first media functional mode being different than the second media functional mode because this feature transforms account for differences between mobile clients without imposing significant processing burdens on the content server [Fishman, see abstract]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to associate the appropriate transforms with particular mobile clients [Fishman, col.13, lns.29-31].

5. With respect to claims 8 and 46, Kovacs further teaches wherein the interconnection network is further operative to configure the plurality of heterogeneous computational elements for media reception on a plurality of frequencies [paragraphs 0036 and 0067].

6. With respect to claims 10 and 48, Kovacs further teaches wherein the interconnection network is further operative to configure the plurality of heterogeneous

computational elements for media transmission on a plurality of frequencies [i.e. Bluetooth, IEEE 802.11, ... fig.1].

7. With respect to claim 14, Kovacs does not explicitly show a memory coupled to the plurality of heterogeneous computational elements and to the interconnection network, the memory operative to store the first configuration information and the second configuration information.

In a wireless communication system, Fishman discloses a memory coupled to the plurality of heterogeneous computational elements and to the interconnection network, the memory operative to store the first configuration information and the second configuration information [fig.2; col.9, ln.30 – col.10, ln.64; and col.11, ln.17 – col.12, ln.14].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view Fishman by coupling a memory to the plurality of heterogeneous computational elements because this feature transforms account for differences between mobile clients without imposing significant processing burdens on the content server [Fishman, see abstract]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to associate the appropriate transforms with particular mobile clients [Fishman, col.13, lns.29-31].

Art Unit: 2151

8. With respect to claim 15, Kovacs does not explicitly show wherein the first configuration information and the second configuration information are stored in a second plurality of heterogeneous computational elements configured for a memory functional mode.

In a wireless communication system, Fishman discloses a memory coupled to the plurality of heterogeneous computational elements and to the interconnection network, the memory operative to store the first configuration information and the second configuration information [fig.2; col.9, ln.30 – col.10, ln.64; and col.11, ln.17 – col.12, ln.14].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view Fishman by coupling a memory to the plurality of heterogeneous computational elements because this feature transforms account for differences between mobile clients without imposing significant processing burdens on the content server [Fishman, see abstract]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to associate the appropriate transforms with particular mobile clients [Fishman, col.13, lns.29-31].

9. With respect to claim 16, Kovacs does not explicitly show wherein the first configuration information and the second configuration information are stored as a configuration of the plurality of heterogeneous computational elements.

In a wireless communication system, Fishman discloses wherein the first configuration information and the second configuration information are stored as a configuration of the plurality of heterogeneous computational elements [fig.2; col.9, ln.30 – col.10, ln.64; and col.11, ln.17 – col.12, ln.14].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view Fishman by storing the first configuration information and the second configuration information as a configuration of the plurality of heterogeneous computational elements because this feature transforms account for differences between mobile clients without imposing significant processing burdens on the content server [Fishman, see abstract]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to associate the appropriate transforms with particular mobile clients [Fishman, col.13, lns.29-31].

10. With respect to claims 20 and 50, Kovacs further teaches wherein apparatus is embodied within a mobile station [i.e. base station **15**] having a plurality of operating modes [fig.1].

11. With respect to claim 51, Kovacs further teaches wherein the plurality of operating modes of the mobile station includes mobile telecommunication, personal digital assistance, multimedia reception, mobile packet-based communication, and paging [fig.1].

12. With respect to claims 22 and 52, Kovacs further teaches wherein a first portion of the plurality of heterogeneous computational elements are operating in the first media functional mode while a second portion of the plurality of heterogeneous computational elements are being configured for the second media functional mode [paragraph 0036].

13. Claims 2-7, 9, 11-13, 18-19, 21, 40-45, 47, and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kovacs in view of Fishman as applied to claims 1 and 39 above, and further in view of Jokinen et al., U.S. Patent Application Publication No. 2003/0026242 (hereinafter Jokinen).

14. With respect to claims 2 and 40, Kovacs and Fishman do not explicitly show wherein the plurality of media functional modes include an acquisition mode, a traffic mode, and an idle mode.

In a communication system, Jokinen suggests wherein the plurality of media functional modes include an acquisition mode [i.e. BCCH, paragraph 0004], a traffic mode [i.e. traffic channel, paragraph 0007], and an idle mode [paragraph 0006].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view of Fishman, and further in view of Jokinen by including an acquisition mode, a traffic mode, and an idle mode because this feature will be transmitted on the hopping sequences of the other base stations [Jokinen, paragraph 0022]. It is for this reason that one of ordinary skill in the art at the

Art Unit: 2151

time of the invention would have been motivated in order to use the information to make a handover decision [Jokinen, paragraph 0004].

15. With respect to claims 3 and 41, Kovacs and Fishman do not explicitly show wherein the acquisition mode includes a channel acquisition mode and a control processing mode.

In a communication system, Jokinen suggests wherein the acquisition mode includes a channel acquisition mode and a control processing mode [i.e. BCCH, paragraph 0004].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view of Fishman, and further in view of Jokinen by including a channel acquisition mode and a control processing mode because this feature will be transmitted on the hopping sequences of the other base stations [Jokinen, paragraph 0022]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to use the information to make a handover decision [Jokinen, paragraph 0004].

16. With respect to claims 4 and 42, Kovacs and Fishman do not explicitly show wherein the traffic mode includes a voice reception mode, a voice transmission mode, and a control processing mode.

In a communication system, Jokinen suggests wherein the traffic mode includes a voice reception mode, a voice transmission mode, and a control processing mode [i.e. traffic channel, paragraph 0007].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view of Fishman, and further in view of Jokinen by including a voice reception mode, a voice transmission mode, and a control processing mode because this feature will be transmitted on the hopping sequences of the other base stations [Jokinen, paragraph 0022]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to use the information to make a handover decision [Jokinen, paragraph 0004].

17. With respect to claims 5-6 and 43-44, Kovacs and Fishman do not explicitly show wherein the traffic mode includes a data reception mode, a data transmission mode, a data processing mode, and a control processing mode.

In a communication system, Jokinen suggests wherein the plurality of media functional modes include an acquisition mode [i.e. BCCH, paragraph 0004], a traffic mode [i.e. traffic channel, paragraph 0007], an idle mode [paragraph 0006], and a control processing mode [paragraph 0058].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view of Fishman, and further in view of Jokinen by including an acquisition mode, a traffic mode, an idle mode, and a control

processing mode because this feature will be transmitted on the hopping sequences of the other base stations [Jokinen, paragraph 0022]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to use the information to make a handover decision [Jokinen, paragraph 0004].

18. With respect to claims 7, 17, 45, and 53, Kovacs and Fishman do not explicitly show wherein the control processing mode includes processing of a plurality of GSM control channels, the plurality of GSM control channels including a broadcast control channel (BCCH), a frequency-correction channel, a synchronization channel (SCH), a plurality of common control channels (CCCH), a slow associated control channels (SACCH), and a fast associated control channel (FACCH).

In a communication system, Jokinen suggests wherein the control processing mode includes processing of a plurality of GSM control channels, the plurality of GSM control channels including a broadcast control channel (BCCH), a frequency-correction channel, a synchronization channel (SCH), a plurality of common control channels (CCCH), a slow associated control channels (SACCH), and a fast associated control channel (FACCH) [paragraphs 0057-0058 and 0006].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view of Fishman, and further in view of Jokinen by including processing of a plurality of GSM control channels, the plurality of GSM control channels including a broadcast control channel (BCCH), a frequency-correction channel, a synchronization channel (SCH), a plurality of common control

channels (CCCH), a slow associated control channels (SACCH), and a fast associated control channel (FACCH) because this feature will be transmitted on the hopping sequences of the other base stations [Jokinen, paragraph 0022]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to use the information to make a handover decision [Jokinen, paragraph 0004].

19. With respect to claims 9, 11, 47 and 49, Kovacs and Fishman do not explicitly show wherein the interconnection network is further operative to configure the plurality of heterogeneous computational elements for media reception in a plurality of time division multiple access (TDMA) time slots.

In a communication system, Jokinen suggests wherein the interconnection network is further operative to configure the plurality of heterogeneous computational elements for media reception in a plurality of time division multiple access (TDMA) time slots [paragraph 0006].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view of Fishman, and further in view of Jokinen by implementing in a plurality TDMA because this feature will be transmitted on the hopping sequences of the other base stations [Jokinen, paragraph 0022]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to use the information to make a handover decision [Jokinen, paragraph 0004].

20. With respect to claims 12 and 13, Kovacs and Fishman do not explicitly a timing unit coupled to the network interface and the timing unit operative to provide synchronization and over sampling.

In a communication system, Jokinen suggests a timing unit coupled to the network interface and the timing unit operative to provide synchronization and over sampling [paragraphs 0033-0035].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view of Fishman, and further in view of Jokinen by operating the timing unit to provide synchronization and over sampling because this feature will be transmitted on the hopping sequences of the other base stations [Jokinen, paragraph 0022]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to use the information to make a handover decision [Jokinen, paragraph 0004].

21. With respect to claims 18 and 19, Kovacs and Fishman do not explicitly show the controller operative to direct and schedule the configuration of the plurality of heterogeneous computational elements for the first functional mode and the reconfiguration of the plurality of heterogeneous computational elements for the second functional mode.

In a communication system, Jokinen suggests the controller operative to direct and schedule the configuration of the plurality of heterogeneous computational

elements for the first functional mode and the reconfiguration of the plurality of heterogeneous computational elements for the second functional mode [paragraphs 0033-0035].

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Kovacs in view of Fishman, and further in view of Jokinen by scheduling the configuration of the plurality of heterogeneous computational elements for the first function mode because this feature will be transmitted on the hopping sequences of the other base stations [Jokinen, paragraph 0022]. It is for this reason that one of ordinary skill in the art at the time of the invention would have been motivated in order to use the information to make a handover decision [Jokinen, paragraph 0004].

22. With respect to claim 21, Kovacs further teaches wherein the plurality of operating modes of the mobile station includes mobile telecommunication, personal digital assistance, multimedia reception, mobile packet-based communication, and paging [fig.1].

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. "Intelligent harvesting and navigation system and method," by Jamtgaard et al., U.S. Patent No. 6,430,624.

b. "Method and architecture for interactive two-way communication devices to interact with a network," by Schwartz et al., U.S. Patent No. 6,473,609.

c. "Unified XML voice and data media converging switch and application delivery system," by Giroti et al., U.S. Patent Application Publication No. 2003/0018700.

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi V. Tran whose telephone number is (571) 272-4067. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nghi V Tran
Patent Examiner
Art Unit 2151

NT


ZARNI MAUNG
SUPERVISORY PATENT EXAMINER